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AUTHOR Andrews, Sharon Vincz
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ABSTRACT

An overview of research studies on education points up the fact that there has been an emphasis in teacher education research on how things are done in classrooms, almost to the exclusion of why. The "how" issues of control, management, and measurement lend themselves to the dominant research paradigm. The "why" issues of theory, intellectual development, and development of learning environments in schools must be addressed by attempts to reconceptualize teacher education and the inquiry that supports it. Part of that reconceptualization is a rethinking of the methodology and reporting of data from classroom teaching and inquiry. That methodology and reporting of data is inquiry if it is premised on students' and instructors' questions, and if this inquiry purports to inform practice. The general framework of data collection, analysis, and development of grounded theory (Glaser & Strauss, 1967, as reconceptualized and operationalized by Lincoln & Guba, 1985) provides the methodological mechanics for this study. It is noted that the best educational researchers should be the best teachers, if their research is indeed informing their practice. Teaching as inquiry does provide a powerful research context for pursuing the reconceptualization of teacher education. (JD)

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TEACHING - AS - INQUIRY:

A CONTEXT FOR QUALITATIVE DATA COLLECTION AND ANALYSIS

Sharon Vincz Andrews
Indiana State University
Department of Elementary and Early Childhood Education
Terre Haute, IN 47809
1-812-237-2834

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TEACHING-AS-INQUIRY: A CONTEXT FOR QUALITATIVE DATA COLLECTION AND ANALYSIS

Introduction

Educational reformers are writing volumes on the necessity for change in the way we educate our children and our future teachers. Those involved in the education of future teachers are currently searching for ways to improve the structure and content of teacher education programs. Inquiry projects embrace this search. We are nearing a crossroads in our thinking about the relationship between classroom teaching and educational inquiry as the context and substance of reform in education. Background research for this study suggests that reform efforts in teacher education have been based on narrow conceptions of **teaching**, **learning** and **inquiry** which have limited our vision of the possibilities of schooling. For these reasons reform efforts in teacher education have been only marginally effective and have failed to answer the field's most pressing questions.

As a researcher and teacher of language arts methods, my ongoing questions have crystallized into several major ones: How can I make my courses more meaningful?, What learning contexts best support critical thoughtful learning?, How can I help preservice teachers think through their beliefs and develop some reasoned position from which to develop curriculum? How can I help preservice teachers engage with the profession and feel some ownership of their experiences in teacher education? One avenue which I pursued for researching these questions was to develop a

research project and context in teacher education in which a group of preservice teachers, inservice teachers, a school principal and I worked together for a semester in a language arts methods course. Although I was the instructor of record we all became teachers, researchers, and learners in pursuit of ways to teach reading and writing to elementary school children. My initial questions for this specific project were: how can I trace the theoretical development of preservice teachers in reading and language arts and what is the impact of an authoring cycle curriculum (Harste, Short & Burke, 1988) on the development of a community of learners.

This study was, first of all, an effort at reconceptualizing the course structure and curriculum development of a language arts methods course for preservice teachers in elementary education. Secondly, the study was an effort at reconceptualizing teaching as inquiry--the transactions of the teaching/learning process become the contextand substance of inquiry. Curriculum and research decisions were considered parallel or joint functions.

The project development proceeded from an interdisciplinary perspective, paralleling and integrating insights from critical theory, semiotics and language learning theory. Though it is not within the scope of this paper to pursue all aspects of this interdisciplinary approach, a brief example of this integrative perspective will serve to provide a backdrop for the study. Looking at teacher education through an inteOrdisciplinary lens

allows us to use the reflective role of language in learning as a metaphor for the reconceptualization of teacher education. Through language we make our knowledge public and are able to reflect upon and question our current beliefs. Because language is social, it demands a context which offers collaborative partnerships for learning. Just as language (oral and written) is learned through demonstration, collaboration, reflection, and voice, so our teaching practice and inquiry are shaped and informed by these same social learning transactions. These transactions, examined in light of a specific social and educational context, illuminate and extend our current theories of teacher education and give us new views of political awareness and empowerment.

Background

The recent Carnegie (1986) and Holmes (1986) reports on the state of teaching and education in the United Stated has prompted a tremendous outflowing of the rhetoric of reform in teaching and in teacher education. There are calls for more automony for teachers, more teacher decision making in schools, more professionalism, and just compensation. The background research for this project has convinced me that three major factors continue to contribute to the seeming crisis in American education (including teacher education): curriculum and teaching are based largely on a behaviorist model of learning (Doll, 1986; Woodring, 1979), teaching is a feminized profession which has not

yet found autonomy and professionalism (Apple, 1983; Densmore, 1987; Popkewitz, 1987), and educational inquiry has been dominated by experimental and correlational research which has little to offer the practitioner and which has done little to solve the chronic problems in education (Lanier and Little, 1986; Lincoln and Guba, 1985). Additionally, there is very little indepth research of ANY kind in preservice teacher education (Goodman, 1986; Koehler, 1985). The research efforts which to exist do not have as their research contexts actaul teacher education classrooms. The exceptions which are available, such as Gitlin, Siegel, & Boru (1988) are not in-depth reporting but rather incidental accounts which demonstrate facets of their more immediate research interests. Additionally, traditional teacher education research seldom focuses on the actual conduct of teacher education courses. A brief discussion of traditional research perspectives serves to highight distinctions between traditional educational research and teaching as inquiry.

Traditional Educational Inquiry: The Quest for Scientific Legitimacy

Our world views are deeply embedded in our culture. As Eisner (1984) and Patton (1978) tell us, we are socialized into our ways of knowing, into ways of conceptualizing what is important, legitimate, reasonable, and possible. As educational researchers, we have spent a great deal of our short history immersed in a particular paradigm. We, in the social sciences, have been entrenched in a battle to legitimize ourselves in an

inquiry methodology which has little to offer the practicing teacher or teacher educator. Lanier and Little (1986), in the second edition of the Handbook of Research on Teaching, write,

> There are . . . a plethora of studies demonstrating that teachers can learn all sorts of things when formally taught. Emanating from an apparently defensive posture, numerous studies show that teacher education can make a significant short-term difference. Many researchers have administered pre and post instructional measures of knowledge and attitude in search of some selected change, following one or another instructional treatment. They find that prospective and practicing teachers can indeed "learn new tricks," and master all sorts of subject matter knowledge and skills of the trade. . . . [However], it is hardly informative to learn that models and modeling (even if called supervising teachers or demonstrating teachers) make a difference and that corrective feedback (even if referred to as coaching) enhances learning. . . (p. 528).

They refer to a number of other experimental and quasi-experimental studies and dismiss them as somewhat uncompelling in light of the chronic problems in teacher education. However, these types of studies dominate teacher education research.

More recently, many have begun to rethink the question, "What is the role of research in teacher education?" Is it to identify salient clusters of teacher behaviors, analyze their consequences and design interventions? Or is it to examine the contexts of lived-through classroom experience and the mutual influences of all participants on learning and teaching? Perhaps these are not mutually exclusive goals, but there is evidence to suggest that research in teacher education has assumed the first of these roles almost exclusively in the past eighty years

(Lanier and Little, 1986; Eisner, 1984) and that teacher education has changed very little in the past one hundred years (Cuban, 1986, 1988).

Lortie's classic study, Schoolteacher, should have alerted the field to the need for change in teacher education but such research has apparently had little impact on curriculum in teacher education. According to Lanier and Little (1986), curriculum in most teacher education programs still reinforces conservative, intellectually dependent attitudes in pre- and inservice teachers and the development of skills and techniques for management over issues of intellectual autonomy and development of theoretical stance. However, a few researchers doing descriptive and ethnographic studies in the area of field experience are helping us to understand why these intellectually dependent attitudes persist. Feimen-Nemser & Buchanan (1983), J. Goodman (1985, 1986), Griffin (1982) and Zeichner & Tabachnick (1982), and others have shown that there continues to be a definite emphasis in teacher education on **how** things are done in classroom, almost to the exclusion of **why**.

Those "how" issues of control, management and measurement lend themselves to the dominant research paradigm. The "why" issues of theory, intellectual development, development of learning environments in schools must be addressed by attempts to reconceptualize teacher education and the inquiry that supports it. Part of that reconceptualization is a rethinking of the

methodology and reporting of data from our own classroom teaching and inquiry.

It is that methodology and reporting of data which will be highlighted in this paper. I make the case in this research that teaching is inquiry if indeed our teaching is premised on our (the students' and the instructors') questions and our inquiry purports to inform practice. The general framework of data collection, analysis, and development of grounded theory (Glaser & Strauss, 1967 as reconceptualized and operationalized by Lincoln & Guba, 1985) provided the methodological mechanics of this study. Early on, data from journals, transcripts, tapes, and interviews to unitized and coded and categorized. Emerging themes and questions became the basis for further questioning and curriculum changes. The data collection points were also curricular events.

The Project: A Curricular Context for Data Collection

Course description: A Curricular Framework

The course which was the focus of this study was part of a cluster of methods courses for preservice teachers. The other courses were reading methods and general issues. The course syllabus (Appendix A) shows the reader the initial explanation of the course given to participants in the first of twelve three-hour seminars.

Authentic Reading and Writing: The Authoring Cycle

The authoring cycle (Appendix A, p.2) as a curriculum framework provided a forum for the sharing of personal and professional experiences and a context for discussion and demonstration of an alternative curricular model for elementary school classrooms. We began with literature circles--the reading and sharing of ideas on particular books chosen for the common denominator of family experiences. It was powerful in terms of the bonds developed between the paired adults in the shared oral reading of good literature and in the evoking of family memories and the committing of these stories to writing. The authoring cycle framework helped to create a trusting, caring collaborative context. In this new setting we discussed the two books we had read and jotted down possible family story ideas from our own experiences. We returned the following week with rough drafts of family stories. In small groups (author's circles), we shared our stories, asking for comments and suggestions. Within the next few weeks, other small group meetings for "author's circles" and "editor's tables" led to the publishing of the group collection of our family stories. We also used the auhoring cycle framework for the writing of children's books and the reporting of classroom research projects conducted by pairs of pre and inservice teachers.

The writing and sharing of events and memories both personal and professional helped to forge and shape the collaborative spirit of the group and provided demonstrations for pre- and inservice teachers who were attempting to implement

seminar curriculum in their own classrooms. The structure of the seminar classes as shaped by the authoring cycle contributed to a bridging of the gap between methods courses and the real world of teaching. During this time group members were keeping journals, sessions were taped, and the data collection points became valuable curricular refocusing points as our reflections and learning informed curriculum.

Curriculum Structure: Bridging the Gap and Professionalizing Field Experience

Traditionally, preservice teachers are assigned virtually at random to teachers who often are "required" by their principals to take field experience students. These experiences are often less than rewarding for all involved. A number of factors contribute to these poor field experiences: a mismatch of teaching and learning styles or philosophies, lack of time for discussion of goals and strategies, lack of interest in or opportunity for building a good relationship between inservice and preservice teachers, and little obvious relationship between the methods and theoretical stance of the inservice teacher in the field experience classroom and the methods and stance espoused in the corequisite methods courses. Additionally and perhaps most importantly, the traditional "teacher" and "learner" modes are often left intact and undisturbed. The inservice teacher is viewed as expert knowledge dispenser and the preservice teacher is perceived as the novice, a passive recipient of knowledge. These views inhibit learning for the

preservice teacher and inhibit change for the inservice teachers. Knowledge of "how to teach" becomes static and curriculum becomes primed for the influx of programs which define, outline, and parcel out increments of knowledge to "expert/manager" teachers.

The seminar structure provided a context in which the above issues could be addressed. To begin with, the entire project was voluntary for both inservice and preservice teachers. Second, at the end of the first three hour seminar, the inservice/preservice pairs matched themselves for the field experience portion of the semester. Third, time was provided for "one-on-one" teacher chats throughout the semester. Fourth, the methods and philosophies espoused in the seminar were discussed and dissected by the entire group, with many of the teachers implementing some portion of the demonstrated curriculum structure and methods in their classrooms. Finally, a number of curriculum strands, such as pen pal projects, literature circles, and classroom research projects, helped to bridge the gap between methods courses and the "real world" of teaching, thereby professionalizing the field experience.

Having discussed the major curricular components of the course which provided the context for this study, I turn now to the research aspects and their parallels to the curricular decisions. Teaching as inquiry means moving toward the notion that the transactions which students and instructors create and which we call curriculum are vehicles for informing our practice.

Our relationships and dialogue become the data for curricular analysis and change.

Teaching-as-Inquiry: Research for the Practitioner

As researchers become interested in the process of change, their research models must move toward the emerging paradigm of naturalistic or collaborative research. The collaborative researcher seeks to promote and utilize social learning relationships within the collaborative groups, to provide opportunities for all voices to be heard, and to break down constraining barriers and roles which define us as either learner or teacher, neophyte or expert, theorist or practitioner. Short (1986) states,

> Collaborative research is an intertextual experience where the texts of each of the collaborators become interwoven. Collaboration is thus a constructed reality where the individual views of reality held by the different collaborators become intertextualized in such a way that goes beyond the individual realities (p. 36).

What are the implications of socially constructed knowledge for methodology? As Heine writes,

> The decision to engage in collaborative research is a theoretical decision which reflects a set of beliefs about learning and the nature of knowledge. These beliefs provide a theoretical framework by which to judge the appropriateness of specific procedures within collaborative research. Methodological decisions are made on the basis of this theory and such pragmatic issues as: who is involved, what type of data is available, what question is being asked, what we already know, and what course of action makes sense to participants (p. 108).

In order to engage in teaching as inquiry the instructor/researcher must plan for contexts in which social learning relationships are maximized and role boundaries minimized. While all aspects of the role boundaries and responsibilities of instructors in university settings cannot be eliminated, the invitation to negotiate curricular events can be shared with all participants.

Role of research in teacher education

I have taken the stance that the role of research is to inform practice by **being** that practice: Teaching as inquiry. When teacher educators begin to examine their own teaching and the learning contexts they develop, then the inquiry in which they are engaged becomes the teaching and the teaching the inquiry. Reform in research practice and reform in teacher education will go hand in hand as actual teaching becomes not only the focus of inquiry, but the inquiry itself. The inquiry methods become the curriculum structures and vice versa. Figure 1 [attached] shows the interweaving of the curricular strands discussed earlier and the research strands which propelled and documented the project.

Purpose

The purpose of this study was to explore and describe the context and negotiated curriculum of a language arts methods class in elementary education. Further, the study attempted to trace the theoretical development of the thinking of preservice

teachers in regard to the teaching and learning of language arts. Additionally, the study examined the development of political awareness of preservice teachers in school settings. Finally, the study focused on the power of the relationships which developed between preservice and inservice teachers as they became research partners in the classroom.

Methodology

Research methods should be selected not on the basis of their status in the field but on their "fit" with the focus of the study (Lincoln & Guba, 1985). Because the focus of the study was to investigate a teaching and learning context in addition to political development and theoretical awareness, the research methodology had to allow for the natural unfoldment of the research questions and themes. I joined with my collaborators in looking at our study group from multiple stances and thoroughly to describe, interpret, and construct the knowledge which ultimately formed the enacted curriculum and the dissertation itself. However, it should be noted that my perspective as a critical theorist and my belief that education is a value-oriented enterprise supported a non-neutral and non-objective stance with regard to course issues and therefore with regard to initial research questions. Some questions and themes I valued and traced from the beginning. Others emerged as they held particular meaning for other group members.

The general framework of data collection, analysis, and development of grounded theory developed by Glaser & Strauss (1967) provided the methodolgical mechanics of this study. Early on, data from transcripts, journals and interviews was unitized, categorized and recategorized in the search for patterns and themes to pursue in subsequent analysis. It should be noted that Glaser & Strauss (1967) were not working within the naturalistic paradigm and were intent upon "prediction and explanation of behavior," rather than joint construction of meaning between participants as a means for examining the processes of transaction being group members.

Additionally, some group members evaluated our work in light of the larger social and political climate of schooling. Such research perspectives as these require a methodology as is now emerging in emancipatory (Lather, 1986), educative (Gitlin, Siegel & Boru, 1988) and collaborative research (Short, 1986). The research methods that are developing in this mode of inquiry are characterized by reciprocity and negotiation. For example, in this study participants helped analyze data and responded to and negotiated the written documents.

Data Collection. Data collection procedures reflected the pragmatic issues of being a teacher and researcher. Much audio and video taping of classroom interactions and interviews was necessary because I was an active participant in the research context. These artifacts of research were not viewed solely as

static data collection devices but as dynamic opportunities for reflection on the teaching and learning process. Data collection, analysis, research findings, reporting were constructed as much as possible by a number of the participants and not just the primary researcher. However, because of the nature of this project and document as dissertation artifacts, the responsibility for the major part of the analysis and reporting remained with me, the primary researcher.

Analysis. Because of my strong belief that teachers must develop a theoretical stance on the learning and teaching of language, I set out to collect and examine data in this area. A number of other themes emerged during the course of the research. Among the most interesting of these were the generative nature of the relationships formed between the preservice and inservice partners and the development of political awareness. From the analysis of the data, from journals, interviews, and audio and video tapes, I was able to explore these themes as they were played out in the interactions between these partners. The following chart shows the parallels between learning, research, and teaching. Four areas of engagements in teaching as inquiry are highlighted here.

Curricular Engagements/Data Collection points: Context for Analysis

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ENGAGEMENTS: Teaching as Inquiry

LEARNING	RESEARCH	TEACHING/CURRICULUM
1. reflexivity	journals	negotiated input
2. anomalies	viewing tapes	part of curriculum
3. artifacts	debriefing/interviews	provided curriculum data
4. critique	journals/interviews	new directions values/agenda

Reflexivity

The looking back at our thinking and learning critically was a powerful learning mode in this setting. Curricular structures such as journals and interviews and debriefing sessions for the primary researcher enabled us all to see ourselves as knowledge generators rather than passive receivers of information.

Confronting anomalies

Viewing tapes, pursuing questions, curricular experimentation provided opportunities to see anomalies in our thinking and practice. As we engaged in reflexivity and circled back to previous developed artifacts, we often confronted anomalies which pushed our thinking even further.

Responding to artifacts

Class discussions, literature circles, author's circles provided artifacts--any spoken or written thoughts which provide for reflexivity. We were able to compare our movements in thinking and how our veliefs systems changed.

Critique

Disagreement based upon strongly held values or beliefs, "debate," and individual classroom research provided for critique. As anomalies were confronted our thinking was redefined. This redefining resulted in critique of our own and others beliefs and practice. Debate and discussion led to inquiry as we pursued our questions.

All of these learning modes or events were recorded in some way. The data collection occurred within the framework of the curriculum and was used to modify the curriculum and to trace to development of various themes. Thus teaching-as- inquiry acknowledges that both teaching and learning are predicated on inquiry--not only the "larger" inquiry of the instructor/researcher but also the daily curiosity of all learners and teachers in the setting.

Data analysis began with the first interviews and continued throughout the semester. Meaningful units or "chunks" of data from journals, interviews and taped sessions were entered onto 3x5 cards. Themes and areas for further investigation began to emerge as cards were sorted and recategorized. Curriculum

direction, choice of topics and materials were influenced by the on-going data analysis.

Reporting: Vertical and horizontal slices of the data

From interview data, journals and other transactions with group members, I noted and categorized references to various group members whose beliefs and actions seemed to be foregrounded for many members.

Vertical. I eventually asked each group member who the "interesting" pairs of pre- and inservice teachers were--those whose relationship or interactions warranted further inquiry or whose beliefs, relationships or actions might be instructive to those interested in thee project. From there I began to look at the files of data on those pairs and traced salient themes for them. Three pairs and six theme pieces depicting movement in theoretical stance, political awareness, social relationships, risk-taking resulted, providing an interesting development and use of qualitative data. Member checking of written documents occurred in triads--a preservice teacher, the inservice partner and myself. I made every effort to maintain the voices of participants through extensive use of direct quotes. The written documents were negotiated between triad members and then circulated to the entire group for comment and feedback.

Horizontal. I looked at the interpreted data from individuals in the themes pieces and sorted all data according to how language was used to learn.

This sorting resulted in a set of **Tenets** concerning the role of language in learning the major categories of which are 1) Language for creating environments, 2) Language as a tool for reflexivity, 3) Language as a tool for inquiry, and 4) Language as a tool for finding and maintaining voice. It is beyond the scope of this paper to treat these tenets in detail, however, they will be alluded to in the concluding sections.

Implications for Teacher Education

Education students should not be able to say a one student did,

> So much more was expected of me in the seminar (this research project). It made me go home and think about so many things that I probably would have closed by eyes to. You can definitely avoid thinking about things in a regular classroom setting.. . for the most part you don't have to take too many risks. You're always in settings where you are protected. Education is definitely the safest area I've ever been in--you don't have to expose yourself at all. You can go slow or keep quiet in the background. Or you can really say your opinion--it's as safe as you want it to be. It was much riskier in the seminar and it made me riskier in my other classes.

The qualities and conditions which language allows--reflexivity, inquiry, the creating of environments, and development of voice--were revealed as major components of a framework for learning and therefore should be major components of curriculum and inquiry in teacher education. For example, building reflexivity into the curriculum demonstrates their own learning process to preservice teachers. We need to provide curriculum invitations which support the sharing of ourselves and

the circling back which creates new texts and artifacts. We must support inquiry in teacher education classes. Students must pursue questions, develop curiosity. In this way they will take responsbility for their own learning and become active thinkers and doers. We must support environments which create supportive tension. Environments must be low-risk and at the same time they must highlight the problematic nature of knowledge and the negotiating of many diverse agendas.

The best educational researchers should be the best teachers, if their research is indeed informing their practice. Teaching as inquiry does indeed provide a powerful research context for pursuing the reconceptualization of teacher education. It gives educational researchers the opportunity to commit themselves to learning, to teaching and to research in ways they have not done before. To study one's own teaching/learning processes in a collaborative context provides a rich context for research.

REFERENCES

Apple, M. (1983). Curriculum for the year 2000: Tensions and possibilities. In Phi Delta Kappan, 64, 321-326.

Carnegie Task Force on the Economy and Teaching. (1986). A nation prepared: Teachers for the 21st century. New York: The Carnegie Forum on Education and the Economy.

Cuban, L. (1986). Persistent instruction: Another look at constancy in the classroom. Phi Delta Kappan, 68, 7-11.

Cuban, L. (1988). The fundamental puzzle of school reform.

Phi Delta Kappan, 69, 340-344.

Densmore, K. (1987) Professionalism, proletarianization and teacher work (pp. 130-160). T. Popkewitz (Ed.), Critical studies in teacher education. New York: The Falmer Press.

Doll, W. (1986). Prigogine: A new sense of order, a new curriculum. Theory into Practice, 25, 10-16.

Eisner, E. (1984). Can educational research inform educational practice. Phi Delta Kappan, 65, 447-452.

Feiman-Nemser, S. & Buchanan,M. (1983). Pitfalls of experience in teacher education. P. Tamir, A. Hofstein and M. Ben-Peretz (Eds.), Preservice and inservice education of science teachers. Philadelphia: Balaban International Science Services.

Gitlin, A. Siegel, M. & Boru, K. (1988). Purpose and method: Rethinking the use of ethnography of the educational left. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA, April 6, 1988.

Glaser, B. & Strauss, A. (1967). The discovery of grounded theory: strategies for qualitative research. Chicago: Aldine Publishing.

Goodman, J. (1986). University education courses and the professional preparation of teachers: A descriptive analysis. Teaching and Teacher Education,2, 341-353.

Griffin, G., Lieberman, A. & Jacullo-Noto, J. (1982). Final report of interactive research and development schooling. New York: Teachers College, Columbia University, 1982.

Harste, J., Short, K & Burke, C. (1988). Reading, writing, and reasoning: The authoring cycle at work in classrooms. Portsmouth, NH: Heinemann Educational Books.

Heine, D. (1988). A sociosemiotic perspective of learning: Teacher learning and curriculum exploration through collaboration. Unpublished doctoral dissertation. Indiana University.

Holmes Group. (1986). Tomorrow's teachers: A report of the Holmes Group. East Lansing, MI: The Holmes Group, Inc.

Koehler, V. (1985). Research on teacher education. Journal of Teacher Education, 36, 23-29.

Lanier, J. & Little, J. (1986). Research on teacher education (pp. 527-569). In M. Wittrock, (Ed.). Handbook of research on teaching. New York: Macmillan Publishing Company.

Lather, P. (1986). Feminist perspectives on empowering research methodologies. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., April, 1987.

Lincoln, Y. & Guba, E. (1985). Naturalistic inquiry. Beverly Hills: Sage Publications.

Lortie, D. (1975). Schoolteacher: A sociological study. Chicago: University of Chicago Press.

Patton, M. (1978). Utilization-focused evaluation. Beverly Hills, CA: Sage Publications.

Popkewitz, T. (1987). Ideology and curriculum. In T. Popkewitz, (Ed.). Critical studies in teacher education. New York: The Falmer Press.

Short, K. (1986). Literacy as a collaborative experience. Unpublished doctoral dissertation. Indiana University.

Woodring, P. (1975). The development of teacher education. In K. Rehage, Ed. Teacher Education.

Zeichner, K. & Tabachnick, B. (1981). Are the effects of university teacher education washed out school experience? Journal of Teacher Education, 32, 7-11.